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Engler C.H.

Nevada: 1936

For map see notebook of E. R. Hall
1936.

4900ft.,
½ mi. W Verdi, Washoe Co., Nev.

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July 1 Left MVZ, Berkeley 8:50 A.M. yesterday. The party consisted of E.R. Hall, Dwight C. Smiley, Emmet T. Hooper, Ward C. Russell, & Earl H. Engler. The MVZ Reo truck & E.R. Hall's Ford were the two cars taken on the trip. The route followed took us through Vallejo, Sacramento, Auburn, & Truckee. We arrived at Verdi Nev. about 4:45PM & made camp about 5:00 P.M. The camp site was about 100 yds S of Nev. State Fish Hatcheries, which is located about ½ mi W of Verdi, Washoe Co., Nev. ~~4900ft~~ W side ~~board of~~ Truckee R., 4900ft,

about 5:45 P.M. set out 20 mouse traps in a locality of artemisia, scattered rocks, & pines. Only one trap was sprung but caught nothing.

about 8:00 P.M shot at bats & succeeded in getting two. Eptesicus fuscus.

July 3 The early part of the morning was spent in preparing the specimens taken the night before. Completing this work about 10: A.M. I started out hunting & succeeded in taking a chipmunk Eutamias amoenus & a Flicker Colaptes cafer. After lunch W.C. Russell put up the flicker & I put up the

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½ mi. W Verdi, 4400 ft., W side Truckee R., Washoe Co., Nev.

July 3

chipmunk.

The rest of the afternoon was spent around camp. Occassionally one or another of the party would go out with shot gun to see what they could bring in. About 5: P.M. trap lines were again set out. E. R. Hall & I took the road going E out of Verdi. 1¼ mi out of town two marmots were seen by the side of the road. E. R. Hall went back to camp after steel traps while I set out 73 traps ¼ of a mile farther up the road on a hill that was quite barren except for a scattering of small Artemesia bushes. Small rocks were in great profusion. Some of the traps were set on & around a rock slide on this same hill, others were set in a dry wash at the bottom of the hill. As on the previous night nothing was taken.

After dinner & as it began to grow dark we tried to shoot some more bats. There was a good breeze coming from the south & very few bats were seen. There were all flying much lower than on the previous evening. Only one (a M. yumanensis) was taken by D. L. Smiley.

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W side Truckee R., 4900 ft., ½ mi. W Verdi, Washoe Co., Nev.

July 3 General discription of first camp

The camp site was in a narrow meadow about 100 yds south of the Nev. State Fish hatcheries. The meadow ran N + S. On the W side was a low hill with a few scattered pines + aspens. Beyond this hill was a small lake in the center of which was a reservoir for the Fish Hatchery. The E side of the camp was bordered by a row of aspens which bordered the Truckee River. At the south end of the meadow was a grove of pines.

Just N of the fish hatchery was a boggy pasture land Bordered on one side, E, by the river + on the W by a low hill ~~heh~~ covered with boulders + artemesia. Ground squirrels were seen in this habitat. (No mammals were seen in the boggy pasture). W of this small hill was another larger hill covered with pines. It was in these pines that the chipmunk was taken.

The weather throughout our stay was warm but not uncomfortably so. The afternoon + evening of July 1 there was

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W side Truckee R., 4900 ft., ½ mi. W Verdi, Washoe Co., Nev.

July 3 (cont) little or no wind. On the afternoon of July 2 a slight breeze began to pick up & it continued throughout the early part of the evening making it difficult to obtain any bats.

We packed up & left this camp on the morning of July 3 about 9:00 A.M. & drove E to Reno.

Mammals seen & taken near camp

1. Peromyscus maniculatus
2. Reithrodontomys
3. Scapanus
4. Thomomys
5. Citellus
6. Eutamias amoenus
7. Myotis sp
8. Eptisicus fuscus

Birds taken or seen near camp.

1. Robin
2. Brewer blackbird.
3. Red winged blackbird

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July 3 (cont) 4. Night Hawk
5. Violet Green Swift
6. Killdeer
7. Evening Grosbeak
8. Calif. Yellow Warbler
9. Calif. Linnet
10. Spotted Towhee
11. Greenbacked Goldfinch

Besides these species there were others that were not identified. The birds were present in great numbers & kinds but there were very few mammals at this camp.

Three kinds of amphibians were found, Bufo, Hyla, & Rana. Two kinds of reptiles were found the Yellow bellied Racer & Garter snake.

July 3 Bought supplies at Reno then drove N to Pyramid Lake then W to Flanigan. Pitched Camp ½ mi NW of Flanigan, 4100 ft. Washoe Co., Nev.

The wind blew steadily throughout the afternoon up until about 6:00 P.M. when it died down. Trap lines were set out in different directions from camp.

½ mi. NW Flanigan, 4200 ft., Washoe Co., Nev.

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July 3. W. C. Russell & I drove to a point 2½ mi E of Flanigan where I set out 60 traps among the short artemesia & Sarcobatus which was growing in loose sand. The exact locality as determined is 2½ mi. E Flanigan, 4200 ft., Washoe Co., Nev. all the traps were set at a distance within 100 ft of the road.

July 4 30 specimens were taken in this set of which 11 were Dipodomys ordii columbianus taken in the more bushy areas., 1 Dipodomys microps levipes., 5 Dipodomys merriami merriami., 2 Peromyscus maniculatus sonoriensis, taken in the more sandy areas., 3 Onychomys leucogaster ., 5 Microdipodops sp. ., 3 Perognathus longimembris.

The morning was spent in preparing specimens.

July 5 Yesterday afternoon at 3:00 P. M. E. R. Hall & I drove to a point 4½ mi. S Flanigan, 4100 ft., Washoe Co., Nev. There is a farm here with running water. The purpose of the trip was to set out gopher traps but only two mounds were found. Traps were set at these points. From this farm

½ mi. NW Flanigan, 4200 ft., Washoe Co., Nev.

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July 5 we drove north to Cottonwood canyon where we placed one set of gopher traps in an alfalfa field 8 miles S of Flanigan. Exact locality, Cottonwood Cr., Virginia Mts., 8 mi. S Flanigan, 4300 ft., Washoe Co., Nev.

(3 mouse traps were set at previous locality. at 4½ mi. S Flanigan) 12 Zyla, 3 Bufo taken here.

July 6. The early morning was spent in work around camp at writing notes, blowing skulls etc. while some of the others visited their trap lines. about 10:00 A.M. E.R. Hall & I drove to the gopher sets. The one in Cottonwood canyon contained 1 Thomomys quadratus. One of the sets at the farm 4½ mi. S of Flanigan held 1 Thomomys bottae. 2 Reithrodontomys were also taken at this place.

Four red winged blackbirds 3♂ + 1♀ were taken here after the traps were collected also one leopard lizzard. Three of the birds were prepared.

at 5:30 P.M. I set out 9 rat traps around the base of a rocky ledge ½ mi. NW Flanigan, 4200 ft., Washoe Co. Nev. + 15 mouse traps on the sandy slope which is spotted with Artemisia + Sarcobatus. They were set about 40 ft apart.

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½ mi. NW Flanigan, 4200 ft., Washoe Co., Nev.

July 6. about 7:30 P.M. last evening E. R. Hall, D.C. Smiley, W. C. Russell & I drove to a water hole 4 mi. S Flanigan to shoot bats. a stong steady wind was blowing & none were seen. Five Hyla were taken at this place (4 mi. S Flanigan, 4100 ft., Washoe Co., Nev

This morning 2 Peromyscus longimembris, 2 Microdipodops & 2 Dipodomys merriami were taken on the sandy brush covered hill in front of camp. 1 Neotoma lepida was taken at the base of a rocky ledge about 200 yds E of camp.

When the mornings catch had been prepared we broke camp & moved north about 30 mi. to Smoke Cr., 3900 ft., 9 mi. E Calif. line, Washoe Co., Nev.

The camp ~~at~~ near Flanigan was on a slope ½ mi NW of town. The general surroundings were sandy brush coveded slopes

To the south & west the country was comparatively flat. The Virginia mts. could be seen in the distance. North of camp about 2 mi was a range of hills on which were many rocky ledges. Here the Neotoma were found. The greater part of the rocky strata had been laid down by old Lake Lahonton & then -

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½ mi. NW Flanigan, 4200 ft., Washoe Co., Nev.

July 6. (cont) fore had many cracks & crevices which offered excellant shelter to those animals living in such places.

South of camp (+ Flanigan) across the dry flats an occassional farm could be found with water & green grass around it. The rocky hills here were more abrupt & seemed to offer some protection from the daily winds which blew across the flats. As a result more birds could be seen flying about during the day. Redwinged & Brewers blackbirds, Dove, Quail, Sandpipers, Barn & Cliff swallows, Ash throated Fly catchers, Song Sparrows, Linnets, Redtailed & Swainson Hawks & Prairie Falcons were seen. Very few gopher workings could be found. The rabbits were thick.

The heat of the day was somewhat abated by the winds that generally blew from the west. This wind would begin about 9:00 A. M. & blow steadily till early evening. The mornings & evenings are cool with no appreciable wind. It was only at these times that bird life was seen at camp. Even then the birds kept close to the ground.

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Smoke Cr., 3400 ft., 9 mi. E Calif. Line, Washoe Co., Nev.

July 6. The closest water hole from camp was about 5 mi. to the south.

July 7 The camp at Smoke Cr., was made in an old cabin bordering the creek.

On the evening of July 6 a trap line of 40 traps, set about 50 ft. apart, was strung along the stream near the cabin. That evening two Eptesicus fuscus were shot just outside the cabin despite a strong wind which was blowing. Bushy tailed wood rats, Neotoma cinerea were seen & heard in the attic of the cabin two were shot by W.C. Russell & traps were set around the house for others. Three bats were caught ~~flying~~ while flying around indoors, one Corynorhinus & 2 Myotis.

3 rats were caught during the night. From the trap line of the previous evening, 6 Peromyscus maniculatus, & 1 Perognathus parvus were taken.

1 Peromyscus sp. was taken among the bushes & high grass bordering a pool of water, the rest of the catch was taken over 75 yds from the stream bed across an alfalfa field & on the edge of brush land. The rest of the traps that

Smoke Cr., 3900 ft., 9 mi. E Calif. line, Washoe Co., Nev.

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were set along the water, except two, were sprung but empty. Rat feces were noted around + on the traps.

July 8. Yesterday afternoon, 3:00 P.M., W.C. Russell + I drove W along the streams bed 15.2 mi. to the Calif. border. Along the way we passed first through open sage, then into a rock walled pass in which occassional pools of water were seen bordered by Willows + a few cottonwoods. 1 Cottontail shot here The rocky cliffs had many cracks + crevices in them loose rock was noted at the base. Prairie falcon nests were numerous. W of this pass the steep slopes were seen to the left with brush rock slides over the faces. Many antelope reported here immediately 12 To the right of the road the hills seemed lower + more rocky. The floor of the valley had been planted with alfalfa which extended west about 4 mi to the border it averaged about 200 yds wide. Two gopher mounds were opened + traps set. At the border two Marmots were shot. At this place the surrounding country was very rocky.

At 8:30 P.M. on the way to camp 6 Myotis + 3 Poorwills were shot in a

Smoke Cr., 3900 ft., 9 mi E Calif. line, Washoe Co., Nev.

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July 8. narrow rock walled canyon thru which the stream flowed. The bats were flying low as they flew up the road, often passing within two feet of us.

July 9 Yesterday morning was spent in preparing the rabbit & bat specimens taken the night before. ~~After lunch~~

After lunch I went out to collect some birds. It was cloudy & quite a stong wind was blowing. No birds could be seen in the open except a few cliff swallows. Some bird notes were heard in the cottonwoods along the Cr. & two Arkansas king birds were taken there. Song sparrows were also heard occassionally. A Red tailed hawk was seen perched in the leafless, topmost branches of a tall cottonwood. A small bird, unidentified was busy hopping about the smaller branches around the hawk drawing attention to the spot with its calls. When I approached, the hawk flew.

Returning to the cabin 5 vultures were seen wheeling about over the sagebrush about 100 to 150 ft high.

Engler
1936 Smoke Cr., 3900 ft., 9 mi. E Calif. line, Washoe Co., Nev.

July 9. A garter snake was taken near the cabin about 45 feet from the stream bed, in an open corral all covered with dry alfalfa.

One of the kingbirds was prepared in the afternoon. Towards evening 10 rat traps were set along the stream bed about 50 feet apart & not over 25 feet from the water.

July 10 It rained a little last night but not enough to soak the ground. The woodrats could be heard rustling in the bushes along the stream. W.C. Russell shot two with the aid of a flash light.

On the morning of July 9. collected my rat traps. Two woodrats were taken. they were taken over 200 feet apart. One had struggled into the stream with the trap & drowned. Like the others taken in the cabin they were N. cinerea

The morning was spent in preparing these two specimens & the remaining kingbird from the previous day.

In the afternoon E.R. Hall, W.C. Russell, D.C. Smiley & I drove north to Buffalo meadows about 20 miles from camp. The first 2/3 of the trip was thru low,

Smoke Cr., 3800 ft., 9 mi. E Calif. line, Washoe Co., Nev.

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July 10 sage brush land not unlike that found near the cabin. An occassional mound of calcareous rock would be passed. at one of these rat traps were set for woodrats.

The other ⅓ of the trip was thru a pass. The adjacent hillsides were covered with blackish volcanic rock with here & there a larger outcropping. Rockslides were also plentiful. o

at Buffalo Meadows we found alfalfa fields. Here we looked for gopher workings but were unsuccesful. Many kangaroo rat signs could be found.

about 5 mi. from the meadows, on the return trip, E.R. Hall drove off the road towards a distant tree dotted mountain. about a mi. from the trees we left the car & walked across rock covered ground to the edge of the trees. They were Juniperus. Here I set out a ~~trap~~ line of 41 traps, scattering them among the rocks & trees about 30 feet apart. I set my line near the dry stream bed between

Smoke Cr., 3900 ft., 9 mi. E Calif. line, Washoe Co., Nev.

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July 10. two hills. The rocks were so thick in places that scarcely 2 sq ft of open space could be found between them. No birds were seen at the locality of the traps but on the slope where we left the car were a number of Horned Larks.

We reached camp about 5:00 P. M. & I shot another Eptesicus fuscus.

July 11. We returned to our trap lines on the morning of July 10. The exact locality was determined as, 19 mi. W Deephole, 4800 ft., Washoe Co., Nev. A coyote was seen crossing the road on our way to the traps. In the traps were found. 1 Reithrodontomys megalotis, 2 Perognathus parvus, 2 Peromyscus crinitus, & 3 Peromyscus maniculatus. These were prepared when we returned to camp.

At two in the afternoon we packed up camp to move to Granite mountain. We left at 3:40 P.M. & drove north thru Deephole & Gerlach to Rock Cr., 5000 Granite Mt., Washoe Co., Nev arriving about 6:45 P.M. where we made camp alongside the running creek.

Engler 1936 Smoke Cr., 3400 ft., 9 mi. E Calif line, Washoe Co., Nev.

July 11. Description of campat Smoke Cr.

Camp was made in a cabin about 100 yds from the road(S.) + 50 yds from a stream bed on the E. This bed was lined with tall Cottonwoods + willow thickets. About 75 yds south of the cabin was a willow thicket which bordered a pool of water about 75 yds in length, 10 yds wide + over 3 feet deep. South of this pool was an alfalfa field which had been cut recently. Beyond the field + stream + surrounding the immediate camp was the open desert like country dotted with Artemesia. The soil, while not ~~loose sandy~~ loose sand, was comparatively sandy. Peromyscus were caught here along with Perognathus. Along the stream, among the willows + in the cabin were many Neotoma cinerea. Garter snakes were caught near the stream. Many different birds were seen in the vicinity of the camp. Lizards (whiptail) were taken.

From camp many side trips were made in different directions in order to set out traps in the different surrounding habitats.

Smoke Cr., 3900 ft., 9 mi. E Calif. line, Washoe Co., Nev.

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July 11 List of birds seen at Smoke Cr. camp
compiled by E.T. Hooper & C.H. Engler.

1. Great Blue Heron
2. Red Tail Hawk.
3. Mallard duck with chicks. (number ?)
4. Black-billed Magpies
5. Turkey Vultures.
6. Screech owl
7. Mourning Dove
8. Valley Quail
9. Nighthawk
10. Poor-Will
11. Cliff Swallows.
12. Tree Swallows.
13. Spotted Towhee
14. Song Sparrows
15. Brewer Blackbird.
16. Red Winged "
17. Calif. Yellow Warblers
18. Linnet
19. Arkansas Kingbird
20. Long tailed Chat.
21. Bush-tit.
22. Green tailed Towhee
23. Lazuli Bunting
24. Vigors Bewick Wren
25. Bullock Oriole

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Smoke Cr., 3900 ft., 9 mi. E Calif. line, Washoe Co., Nev.

July 11.

26. Ash throated Fly catcher.
27. Say Phoebe.
28 Killdeer

July 11. Rock Cr., 5000 ft., Granite Mt., Washoe Co., Nev.

This morning climbed slope just south of camp to a point about 1000 ft. higher than camp. On the way up along the stream bottom saw a Jay. At the top of the hill among the rocks, of which there were a few scattered piles, & Granite I saw some Golden Mantled Ground Squirrels. Approximately 100 ft. down the slope I caught two Hyla ~~around~~ on damp ground around a spring. I shot a rock wren near the spring ~~also~~. Their peculiar bobbing motion while perched on the rocks attracted my attention. Sheep were heard in the distance. The air was rather cool on top of this slope & the ground was quite damp from a recent rain.

July 12. Made return trip to same locality on slope behind camp at 4:00 P.M. July 11, in order to check altitude & set some rat traps at this place for the Callo's seen there. ~~On the way to the top~~

Engler 1936 Rock Cr., 5000 ft, Granite Mt., Washoe Co., Nev.

July 12. On the way up a rattlesnake struck, + crawled towards me from a small ledge. It gave no warning. My next step would probably have landed on the snake if it had not moved, as I did not see it till it struck. I shot at it as it was crawling thru a bush + going through the branches - blew the top of its head + part of its back away

~~As~~ While resting on the top of the hill at the place I was going to set the traps, a wood rat N. lepida climbed up on one of the rocks about 5 ft from me but ran back immediately. This was about 5:00 P.M. I looked among the rocks for it + found some feces of a porcupine. after setting six rat traps among the rocks I descended the hill to the stream + set out a line of 26 mouse traps within a distance of 25 ft of the water. Some were near the water + others were among rocks on the hill. They were set about 50 to 100 ft. apart

July 13. On the morning of the 12th took from the traps the following. At Rock Cr., 6300 ft., Granite Mt., Washoe Co., Nev. (This point is

Rock Cr., 5000 ft, Granite Mt., Washoe Co., Nev.

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July 13 about ½ mi W of camp + on the top of the hill to the S of the Cr.) 1. Neotoma fusicla, 1 Peromyscus maniculatus. at Rock Cr., 5200 ft, Granite Mt., Washoe Co., Nev. I took from along the stream 6 Perognathus parvus + 5 Peromyscus maniculatus. These were taken on the rocky slope N of the stream.

July 14 The morning + afternoon of the 12th was spent in preparing specimens.

On the morning of the 13th I started up the Mt. to meet E.T. Hooper + W.C. Russell who were looking for deer. Starting over the hill just S of camp + about ¾ mi. from camp I flushed a flock of about 12 Sage hens. Two were taken. Farther up this canyon at an altitude of 6000 ft a "Cabo" was shot as it was running thru the brush at the bottom of a dry stream bed. approximately 200 yds farther up this stream a Cottontail rabbit was taken. These two specimens were taken about 6:40 A.M. Twenty min. later I reached a meadow covered with grass + dotted with Artemesia bushes from which over 24 magpies

Rock Cr., 5000 ft., Granite Mt., Washoe Co., Nev.

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July 14 flew up + took refuge in a small grove of aspens.

At the S. end of this meadow is a rock slide between two hills + thru which water runs when flowing. Climbing this slide an occassional chipmunk could be seen as it darted for shelter among the rocks. At the top of this slide 7000 ft., another meadow was reached. Large groves of aspen were ~~[redacted]~~ covering the hillsides. Humming birds, Flickers, Hairy woodpeckers, Green tailed towhees, kingbirds + an Oriole was seen as I walked through the grove. A woodpecker + a Flicker were taken.

Many sheep tracks could be seen around a water hole in the center of the green meadow. The water was full of small tadpoles. The altitude here was 7000 ft.

At the south end of the meadow + within 200 feet of each other was found an antler of a mule deer + one from a white tail deer.

Returning towards camp, quail could be heard ~~of~~ in the distance + one adult was seen followed by some chicks.

Rock Cr., 5000 ft., Granite Mt., Washoe Co., Nev.

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July 14. Reaching camp about noon preparations were made to move to another locality. Description of camp & immediate surroundings.

The camp was located about 23 miles N of Gerlach on Rock Cr., as has ~~about~~ been stated. It was pitched along side the stream & about 150 yds. from the end of the dirt road that goes a short distance up the Cr. The immediate Cr bed is lined with aspens. To the south of camp was a steep hill running east & west & getting higher towards the W. It was covered with Artemesia & an occassional composite. Rocks were scattered over the lower slopes. Higher up the mt. The ground became more gravelly from the decomposing granite until at the top large granite boulders were scattered about. W of camp the stream was came down the mt. It was lined with a greater growth of aspen further up the mt. N of camp was another steep slope but instead of granite boulders it was more rocky & covered with dark lava boulders. Less vegetation

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Rock Cr., 5000 ft., ~~Washoe~~ Granite Mt., Washoe Co., Nev.

July 14 was on this slope. It was here that the majority of *P. pavus* was taken. E of camp the mt sloped away to the alkali flats of the desert.

While the weather was hot down on the desert, the camp at an altitude of 5000 ft. was warm but not uncomfortable. Little wind was noticeable during the day but the first part of the night it blew down the mt eastward.

List of birds identified near this camp.

1. Jay sp
2. Kingbird (Arkansas)
3. Rock wren
4. Mourning dove
5. Valley quail
6. Green tailed towhee
7. Hairy woodpecker
8. Flicker
9. Red tailed hawk.
10. Sage hen.
11. Song sparrow.

Rock Cr., 5000 ft, Granite Mt., Washoe Co., Nev.

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July 14. We left camp for Gerlach in the middle of the afternoon where we purchased supplies. From there we drove W to Deephole past flat open sandy country. From Deephole we ~~swung~~ drove northward through surrounding rocky hills to the Silver Bell mines where we looked for bats Only one ~~small~~ Myotis Corynorhinus rafinesquii was found. Returning about 1½ mi to the main road we drove farther North up a rocky ~~bad~~ road through the hills to a point 15 mi. NW of Deephole, Washoe Co. Nev. where an overnight camp was made. Artemesia surrounded the immediate camp with a few scattered trees farther up the hill at which we were camped.

20 traps were set around camp on loose gravelly soil. 11 Peromyscus maniculatus were taken.

Left this camp for Hausen, Nev. early in the morning. along the way saw Golden Eagle & Red tailed hawks. One hawk was shot by E. T. Hooper 20 mi. NW Deephole, Nev.

Marmots & cottontails were seen on two different occasions along this road. Then the hills. We dropped into the Valley & made camp 1 mi. W Hausen, 4650 ft. Washoe Co., Nev.

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1 mi W. Hausen, 4650 ft., Washoe Co., Nev.
July 15, 1936

July 15. Last night set out a line of 85 traps at Hausen, ~~4650~~ 4800 ft., Washoe Co., Nev. among the Sarcobatus & Artemesia on winddriftable sand. This morning, took from the traps 1 Dipodomys levipes, 3, D. ordii, 7, Microdipodops & 6 Perognyscus mariculatus. ~~The area~~ ~~covered by the trap line did not.~~

July 17. Spent day of 15th around camp preparing specimens for shipment etc.

On morning of 16th packed up camp & left for 12 mi creek in Nev. via Cedarville Calif. & Fort Bidwell. Reached the new camp site in the middle of the afternoon.

Description of Camp 1 mi W Hausen, Nev.

The camp was made in an emergency school house just inside of the Nev. line & about 100 yds from the main road. Artemesia & Sarcobatus surround the cabin. Wind driftable sand is found over most of the country in others the ground is somewhat caked.

There was very little wind noticeable during our stay of 2 days & very few birds other then Cliff Swallows were seen.

Many night flying insects were about but no bats were seen. A few Night hawks were in evidence. To the east of camp about

1 mi. W Hausen, 4650 ft., Washoe Co., Nev.

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July 17 (cont.) 2½ mi ~~east~~ are a few rocky slopes on which Woodrats were taken.

Listing birds seen at or near camp Hausen.

1. Cliff Swallow
2. Nighthawk
3. Mourning dove.

Camp on 17 mi Cr. Nev.

The exact locality of this camp is

July 17. 17 mi. Cr., ½ mi E of Calif. line Washoe Co., Nev.

Last night set out a line of 30 traps on the north slope of the creek. They were set about 60 feet apart & were ~~set~~ among the rock slides on this slope. From this line of traps 11 Peromyscus maniculatus & 3 P. crinitus were taken. The P. crinitus were taken from the rockier parts of the hill, while the P. maniculatus were taken from the more brushy parts.

July 18 At 5:00 P.M. two steel traps were set for ground squirrels at 17 Mi. Cr., ¾ mi. E Calif. line, 5300 ft Washoe Co., Nev. on a small flat area bordering the stream & covered with artemisia bushes which were growing in a loose alluvial soil. Returning to camp 2 California Jays were shot. A Flicker (Red Shafted) flew from the same tree in which the Jays were perched.

12 Mi. Cr., ½ mi. E Calif. line, 5300 ft, Washoe Co., Nev.

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July 18 (cont'd) Other jays were seen feeding on ripe currants which are quite abound in this canyon.

In the evening, as it was getting dark, two Myotis sp. were shot. D. C. Smiley shot 1 Nycteris cinerea.

This morning, July 18. visited steel traps. One had been sprung & was 3 feet from place where it had been set. After resetting the trap & starting back to camp a young Callospermophilus was shot as it was feeding on currants.

July 20 The day (July 18) was spent around camp. In the afternoon about 4:00 P.M. 12 rat traps were set among the aspens just below the rock ledge to the south of camp. Jays were heard among the aspens as well as towees along the stream bed.

The morning of July 19th. visited rat & steel traps. The steel traps were empty. One rat trap held a Peromyscus maniculatus which had been swallowed & regurgitated by a snake. The rest of the traps were empty. Camp was struck about 8:00 A.M. & we left for Cedarville, Calif. at 9:00 A.M.

About 1½ mi. N of the Calif. Immigration station a herd of 35 antelope was seen about 150-yds

Engler 12 Mi. Cr., ½ mi. E Calif. line, 5300 ft., Washoe Co., Nev.

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July 2 (cont'd) from the road. The truck was stopped & they moved off to a distance of about 400 yds. when they continued their grazing, however, some were watching us.

After passing thru ~~Cedarville~~ Fort Bidwell we reached Cedarville about 10:15 A. M. & after supplies etc. were obtained we drove E to Nya & then ½ mi. N. The exact locality of the camp being. ½ mi. N Nya, 6000 ft, Washoe Co., Nev.

Description of Camp on 12 Mi. Creek

½ mi. E Calif. line, 5300 ft, Washoe Co., Nev.

The road leading to the camp-site was down a steep grade into the canyon. along the road ground squirrels of the C. ~~oregonus~~ Type were seen.

The camp itself was within 35 feet of the Cr. which was lined with cottonwoods. N of the camp was a steep hill covered with rock slides of lava. Very few bushes grew on this hill because of the rocks. S of the camp across the Cr. was another steep hill which was covered with artemesia. At the top of the hill was a ledge of rock at the base of which was a border of aspens. A large meadow was beyond this hill on which antelope & deer were seen. Many jays were in the trees along the Cr. & were often seen

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1/2 mi. Ea., 1/2 mi. E Calif. line, 5300 ft., Washoe Co., Nev.

July 20 (cont.) to be feeding on the currant berries which were ripe & quite abundant. "Calli's" were also seen feeding on these berries

1/2 mi. E of Camp was a large meadow covered with green grass. Mallard ducks were seen along the ~~camp~~ Cr. at this place & Sage Hens were found ~~in~~ among the Artemesia bushes on the south hill. Horned Owls were heard in the evenings & on at least 4 occasions Great Blue Herons were seen.

Every evening at 8:03 P.M. bats began to come out.

The evenings were warm but it turned ~~cool~~ cold in the morning just before dawn. The stream likewise was "warm" during the day but was cold in the morning. Trout could be seen in the deeper parts of the Cr. but kept to the shady parts.

~~The pass~~ The wind, when blowing, was from the W but because the canyon was so well protected by the steep walls little wind was felt.

List of Birds seen

1 Sage Hen
2 Mourning Dove
3 Mallard Duck

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12 Mi. Ca., ½ mi. E Calif. Line, Washoe Co., Nev.

July 2 Calif. Jay
5. Great Blue Heron.
6. Horned Owl
7 Red Shafted Flicker
8. Brewer Blackbird.
9. Rock Wren.
10 Nighthawk.
11. Black Crowned Night Heron.
12. Valley Quail
13 Magpie

½ mi. N Vya, 6000 ft., Washoe Co., Nev.

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July 2 (cont) Last night at our new camp I set out a line of ~~600~~ 60 traps, 10 rat traps & 50 mouse traps 50 of the traps were set on the steep rocky slope just west of camp. They were set about 30 feet apart. The rat traps were set along the base of a rocky ledge near the top of the hill. The other ten traps were set near camps on damp ground around a spring. One rat trap was set under the cabin in which camp was made.

This morning, July 20 ~~d~~ 1 Neotoma cinerea was taken from a rat traps at base of ledge near top of hill, also 1 Callospermophilus was taken from rat trap at same place. 1 Neotoma lepida was taken from trap under cabin. ~~Taken~~ from traps around camp were, 1 Microtus mordax, 1 Eutamias minimus & 3. Peromyscus maniculatus. Taken from mouse traps on hill were, 1 Microtus mordax (young), 1 Ilonomys quadratus (young) & 24 Peromyscus maniculatus

July 21. Yesterday afternoon, July 20, W.C. Russell & I drove 17.3 mi. by speedometer, S of Vya to a place where there was a small lake surrounded by Artemesia bushes. On the way, 10½ mi. S Vya a Callospermophilus was shot. At this lake 30 mouse traps were set among the Artemesia bushes on dry,

½ mi. N Vya, 6000 ft., Washoe Co., Nev.

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July 21 (cont.) caked, sandy soil. They were set about 40 ft. apart. The exact locality as determined ~~was~~ was 15 mi. S Vya, 5800 ft., Washoe Co., Nev. From this line of traps 6 Peromyscus maniculatus, 1 Dipodomys ordii, 1 Eutamias minimus, 1 Microdipodops, & 1 Perognathus parvus were taken.

Many horned larks were seen in this vicinity & jackrabbits were plentiful & a few Blacknecked stilts were seen in the lake.

North of this lake at a point 12 mi. S Vya, 5800 ft, Washoe Co., Nev. a line of 20 traps was set among the artemesia bushes which were growing in ~~wind deflated~~ loose sand along the road. 1 Perognathus parvus, 1 Eutamias minimus, 2 Microdipodops & 8 Peromyscus maniculatus were taken from this line of traps. One of the Microdipodops had its head & hind quarters gone, probably eaten by some small mammal.

2½ mi N of this point a sick looking jackrabbit was shot. It was slow in its movements & appeared to have many patches, bare of fur, over its body. Many ticks could be seen on its ears.

At a point 10½ mi. S Vya, 5800 ft, Washoe Co.,

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½ mi. N Vya, 6000 ft., Washoe Co., Nev.

July 21 (Cont.) Nev. 10 mouse traps were set in much the same habitat as the last group. From these traps was taken 1 Dipodomys ordii + 2 Peromyscus maniculatus

Many of the specimens taken ~~were~~ had the nose + toes covered with large red ants which fed on these parts.

This morning on our way to the trap lines a large Antelope was seen alongside the road. As we approached it started off across the flat bushy land + then paused on a low hill about 200 yds distant to look at us + then continued on over the hill.

About 10 mi. S Vya a large flock of Magpies were flushed from among the artemesia bushes along the road. On our return trip they were again in this place.

10 ½ mi. S. Vya a Red tailed hawk was seen carrying something in its claws. A shot caused it to drop ~~a~~ the remains of a young Jack rabbit.

July 22. Morning of July 21 spent in camp. The weather was hot in the morning but it clouded up + it could be seen raining to the east of camp. About 3:30 P.M. E. R. Hall,

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½ mi. N Vya, 6000 ft., Washoe Co., Nev.

July (22 cont) W. C. Russell, D. C. Smiley & I drove N to Diessner. ~~It was~~ It The sky was still overcast & a few drops of rain fell from time to time. about 4½ mi S of Diessner a ~~rattle of~~ rattlesnake was shot by W. C. Russell. It was heard rattling as we drove by the pile of rocks ~~in~~ in which it was coiled. about 4 mi. S of Diessner an antelope raced alongside the car & passed in front of it. Farther on a herd (about 20) ~~Good~~ was seen running across the flat land. Their body ~~was~~ moves smoothly along while their legs seem to bounce under them.

At this same place a flock of Sage Hens were flushed one flew in front of the car & was timed at about 55 mi. per. hr.

4 mi. SW Diessner, 5800 ft., Washoe Co., Nev.

a trap line of 20 traps was set along the edge of a hay field in hopes of taking Microtus mordax reported there by the owner of the land. From this line of traps was taken 10 Peromyscus maniculatus

4 mi. S Diessner, 5800 ft., Washoe Co., Nev.

a line of 35 traps was set among the low artemesia bushes beside the road. The

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Jul 22 (cont'd) [illegible] camp from an [illegible]
heavy rain that continued earlier in
the afternoon. From this trap
was taken 1 Zapus hudsonius,
1 Eutamias minimus, & 11 Peromyscus
maniculatus.

Jul 23 On the morning of the 23rd (about 5:30 A.M.) on the way to the traplines 3 coyote's were seen 2 were in an open field along with some cows. No firearms shot at them at a distance of about 200 they ran about 1/2 mile 100 yds & turned to face us again.

Antelope were again seen about 4 mi. S Denio. The ground was still wet from the rain of the previous day.

Microtus montanus & M. montanus were taken by DC Lindy & DR Hall in the same hay field the M montanus was taken from a pool of water.

Jul 23 Returning to camp, the specimens being prepared, ~~the~~ preparations were made for our departure for Quinn River Crossing, Humboldt Co., Nev.

Description of camp Mile - Vya

The campsite was 7 mi. by road N of Vya an abandoned cabin was used for our

½ mi. N Vya, 6000 ft., Washoe Co Nev.

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July 23 (Cont) work. Western Bluebirds had a nest in the attic + a pair of Barn Swallows were nesting on the back porch under the rafters. This porch was used as a kitchen but the birds continued to care for their young throughout our stay.

West of camp, across the road, was a steep hill at the top of which was a ledge of volcanic rock set upon a sandstone base. Sand stone monuments were found about half way up the hill. The slope was covered with artemesia + Balsamorhiza. The surrounding country was much the same in appearance, sloping away from the hills down to a lake which could be seen toward the north. Low Artemesia bushes covered most of the country. To the S, along the road could be seen a low grass. The

The weather was warm + clear up until the 21st. when it clouded up + rained a little at camp.

A spring was located about 20 yds from the cabin. Around this spring were caught some specimens of Microtus mordax.

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½ mi. N Vya, 6000 ft, Washoe Co., Nev.

July 23 (cont.) List of Birds seen near camp

1. Great Horned Owl
2. Western Bluebird
3. Barn Swallow
4. Shrike (Many)
5. Magpie
6. Prairie falcon
7. Red tailed hawk
8. Brewer Sparrow
9. Sage Thrasher
10. Mourning Dove
11. Sage Hen.
12. Night hawk

We left the camp near Vya about 2:30 P.M. July 22 & drove E past Massacre lakes to the Piute & Shoshone Indian Reservation. The country upto this point was through low hills covered with Artemesia & some sarcobatus. In some of the valleys could be seen green meadows. Shrikes were noticed at many places along the way. Two Golden Eagles were seen perched on top of a rock at the summit of a low hill about 15 mi. NW of the Indian Reservation. Chipmunks & an

July 23 (cont'd) occasional "Callo" were seen beside the road at many points along the way.

~~At the~~ Wrong directions were the cause of our turning N out of our way to Quinn Point Crossing. When we reached a point 5 mi. N Summit Lake, 5900 ft., Humboldt Co., Nev. we made camp by the side of the road. Soon after setting out 20 traps it commenced to rain. At 5:00 A.M. took sky was clear & bright. The sun had already arisen. From the traps were taken 1 Eutamias minimus, 1. Lagurus curtatus & 5. Peromyscus maniculatus.

Two "Coys" were shot by W.C. Russell at this place. Camp was struck about 7:00 A.M. & we continued N to Denio, Oregon via alder Cr. etc. The country along this stretch of road varied from low hilly land covered with rock & low bushes to flat desert land consisting of gravelly soil & low Sarcobatus bushes.

The surrounding hills were rocky & of volcanic origin, many faults &

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5 mi. N Summit L., 5900 ft., Humboldt Co., Nev.

July 23 cont'd Seaps could be seen. About 7 mi. N of Alder Cr., 4600 ft., Humboldt Co., Nev. an Ammospermophilus was seen beside the road on loose gravelly soil covered with Sarcobatus.

We drove S E from Denio thru flat country, the first part of which was covered with Sarcobatus & Artemisia then a stretch of ground was reached which had nothing but a low dry grass covering it. even the hills seemed barren of any brush. We arrived at Quinn R. Crossing about 1:30 P. M.

July 24. Yesterday afternoon E. R. Hall & I drove S from Quinn R. Crossing to DeLong's Ranch about 14 mi. S of the crossing. The country along the way was comparatively flat. The first part of the trip was thru Atriplex growing on a hard alkali soil. Farther S sandy soil was reached on which Sarcobatus & Artemisia were growing. East of the road about 4½ mi. ~~from~~ S of the Crossing low rocky hills were found on which were many rock slides.

Two striped racers & 4 horned toads

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Quinn R. Crossing, 4100 ft, Humboldt Co., Nev.

July 24 (cont.) were seen along the way. Skunks were seen at DeLong's ranch along with Brewer Blackbirds.

On the return from the ranch traps were set at four places along the way. at a point 5 mi. S Quinn R. Crossing 4100 ft, Humboldt Co., Nev. 20 traps were set out around the base of rocks on the hill ~~found~~ at this place. 1 Neotoma lepida, & 2 Peromyscus crinitus.

4½ mi. S Quinn R. Crossing, 4100 ft. Humboldt Co., Nev. 25 traps were set on wind-shiftable sand on which was growing Sarcobatus & Artemesia. 4 Microdipodops were taken here.

4.3 mi. S Quinn R. Crossing, 4100 ft, Humboldt Co., Nev. 10 traps were set at the base of some lava rocks about 150 yds E of the road. 1 Perognathus longimembris was taken.

2½ mi. SW Quinn R. Crossing, ~~4100~~ 4100 ft, Humboldt Co., Nev. 31 traps were set on sand among scattered Sarcobatus bushes. 1 Onychomys, 1 Reithrodontomys megalotis, 1 Microdipodops, 1 Dipodomys levipes were taken from this line of traps.

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Quinn R. Crossing, 4100 ft., Humboldt Co., Nev.

July 25 Packed up & left the River Crossing for Sulphur about 9:00 A.M. The river bed was dry except for a few muddy pools of water. Many "Jacks" were seen near the river bed the night before. The ranchers said that they were having quite a time this year with the rabbits in their gardens. They also reported, what seemed to be, Microtus mordax in field of hay they were working.

As we drove S over a very rough & apparently little used road little animal life was seen after we passed De Longs Ranch. Shrikes & Ravens were seen on the first part of the trip. about 20 mi. N from Sulphur the country became very barren save for a few scatted Atriplex bushes. About 5 mi. N of Sulphur "Jack's" were seen & Badger workings were in evidence. a few sandy areas were reached & large burrows were seen. They seemed to be D. deserti burrows.

Reached Sulphur about 2:00 P.M. & established headquarters in 3 rooms of an old hotel.

Sulphur 4042 ft., Humboldt Co., Nev.

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July 25 The afternoon of the 23 W.C. Russell & I left camp about 5:00 P.M. & drove W of Sulphur about 3 mi. in ~~an~~ vain search for good sand. We returned to a point 1 mi. W Sulphur, 4040 ft., Humboldt Co., Nev & set out 50 traps each on ground that was sandy, but had a crusty surface. Very few low bushes were present & these consisted of Sarcobatus & Atriplex. Taken from this line were 2 Perognathus longimembris, 1 Microdipodops 1 Reithrodontomys megalotis, 1 Peromyscus maniculatus, & 1 Dipodomys microps. The latter had a quantity of Sarcobatus leaves in its pouches.

about 4:00 P.M. W.C. Russell, D.C. Smiley, & I drove E to a point 3.8 mi. NEE of Venado & 11 mi. E of Imlay. Traps were set at intervals along the way. at a point 2 mi. E Antelope, 4400 ft., Humboldt Co., Nev. 15 traps (mouse) were set at the base of a low rocky hill beside the road. The traps were set ~~here~~ near Sarcobatus bushes growing on loose rocky soil. 1 Perognathus longimembris was taken here.

½ mi. E of this point 15 more traps were set halfway up a shale covered

Sulphur 4042 ft., Humboldt Co., Nev.

Engler
1936

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½ mi. E of this point 15 more traps were set halfway up a shale covered

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Sulphur, 4042 ft. Humboldt Co., Nev.

(cont.)
July 26

The country throughout the trip was barren except for the usual low bushes. No trees were seen & very few rock ledges could be seen along the way.

Both Jungo & Venado are situated on the dry flat lake bed.

Owner of hotel in which we are staying came in this morning & among other things told us that the Kit Fox was quite common around Sulphur & would often be caught in traps set for Coyotes, thus being a nuisance

July 27.

6:00 P.M. July 26, E. R. Hall & I drove to within a mile of Black Rock Point. The exact locality being 10½ mi. W & 6 mi. N Sulphur, Humboldt Co., Nev. at which place we each set a line of 86 traps. 62 mouse traps were set on a lava rock slope on which a few low, scattered sarcobatus bushes could be found. A few of these traps ranged across the line into Pershing Co., Nev. 24 mouse traps were placed along a dry wash that ran out onto the alakali flat. From these traps set among the rocks 1 Perognathus formosus, 1 ~~P. longimembris~~, 2 ~~Dipodomys merriami~~, 3 Peromyscus crinitus & 3 Peromyscus maniculatus

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Sulphur, 4042 ft. Humboldt Co., Nev.

July 27 (Cont.) were taken. From those set along the sandy wash were taken 1 Perognathus longimembris, 1 Dipodomys merriami & 2 Peromyscus maniculatus.

We camped overnight at this place & collected our traps in the morning.

The whole trip from sulphur was thru comparatively flat country. The 1st 14 miles was thru hard packed ground on which Sarcobatus was the principle plant as to abundance. Some atroplex was seen. The last five miles was over soft alkali ground thru which we were forced to make our own road. No sign of life was noticed over this part of the trip other than a few Sarcobatus bushes growing along the dry Quinn River bed.

Description of Camp at Sulphur

Head quarters were made in 3 rooms of the hotel in Sulphur from which point traps were set in various directions within a radius of 30 miles.

Sulphur is a small community of about 24 or more buildings inc. homes. It is situated about 3 mile from the nearest hills & is a place where

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Sulphur, 4042 ft., Humboldt Co. Nev.

July 27 cont. railroad section hands live. Water has to be brought in by train & probably because of this fact few birds were seen in the vicinity & these were Horned larks.

Kit foxes were reported to be plentiful around Sulphur but none were seen. The workings of the badger were plentiful & coyotes could be heard in the night.

July 28 Yesterday afternoon we ~~left~~ broke camp & drove S then the dry hills about 50 miles to ~~Seven~~ Vernon ~~Troughs~~, a gold mine. Directions were given us here to adobe flat 15 mi. to the south. The road was poor & we were forced to turn back. We made camp 2½ mi. S Vernon, 4750 ft., Pershing Co., Nev.

68 house traps were set on the low sandy hills, east of the campsite, among Sarcobatus. From these traps were taken 4 Dipodomys microps, 1 D. merriami, 3 Perognathus ~~longimembris~~ longimembris, 1 P. parvus & 1 Microdipodops.

July 29 We broke camp immediately after breakfast & drove via Lovelock to a point 21 mi. W & 2 mi. N Lovelock, Pershing Co., Nev.

Camp was made on flat rocky ground near sand dunes & about 1 mi. from

21 mi. W & 2 mi. N Lovelock, Pershing Co., Nev.

Engler

(cont.)
July 29 the edge of the dry alkali flat. No water was located within a distance of 5 mi. from the camp consequently few birds were seen. Grid iron tailed lizzards were taken from the sandy ~~hills~~ slopes near camp.

On the afternoon of the 28th. W. E. Russell & I drove across the dry lake bed, 5 mi, to the mountains seen from camp in order to set traps for P. famosus & other mice that might be found in rocky places.

We drove up a road 1½ mi from the lake bed to an old cabin which appeared to have been used by a trapper as many coyote, fox & badger skulls were found around the ground. The hills adjoing the cabin instead of being rock were gravelly with only a few bushes growing on them. I set out 26 mouse traps on the hill back of the cabin on ground that had been trampled thoroughly by sheep. From these traps 1 P. famosus, 4 Peromyscus maniculatus & 3 D. merriami were taken. From this place we drove 5 mi. to the next canyon in which a large Cottonwood tree could be seen.

21 mi. W & 2 mi. N Lovelock, 4000 ft., Pershing Co., Nev.

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July 30. We started our trap lines from this tree. 24 traps were set out at a distance of about 70 feet between the traps.

~~In the afternoon~~ We saw an Arkansas Kingbird fly into the tree as we were setting traps & in the morning a Mockingbird, identified by W.C.R., was seen at the same place.

From this place I took 1 Peromyscus manicilatus 1 Perognathus formosus & 1 D. meriami. W.C.R. caught a short horned horn toad here.

Shortly after noon of the 29th we broke camp & left for Lovelock on our way to the Humboldt Range of mts.

Aug. 1. We made camp in El Dorado Can., 6000 ft., Humboldt Range, Pershing Co., Nev. in a cabin beside the road leading up the canyon. 20 yds S of the cabin was a narrow stream & very shallow. Trout had been planted there the spring before. a number of small ones were seen in a very shallow pool some of them half out of the water. One 6 in. trout was taken from the deep part of this pool. Half of its body was above the surface of the water which was too shallow for it to swim in.

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El Dorado Can., 6000 ft., Humboldt Range, Pershing Co., Nev.

Aug. 1 On the eve. of the 29th a line of 40 traps was set along the stream near the water. From this line of house traps was taken 14 Peromyscus manicultus & 1 Onochomys leucogaster. The P. manic ulatus seemed larger than those taken before this summer.

The trap line was left out during the day but nothing was caught. The next morning 12 P. manicultus & 2 Perognathus parvus were taken.

About 9:00 A.M. E.T. Hooper & I hiked up the canyon to an old gold mine mill. A prospector there told us of catching a bushy tailed woodrat & of seeing "Ballos" Chipmunks & also about a mountain lion ~~was seen~~ in the vicinity. Wild horses were seen on top of the mt. We hiked on up the canyon to ~~the 8000 ft~~ on base of a steep hill. E.T.H. killed 1 Microtus mordax & 2 "Ballos". I shot a M. mordax & a Eutamias minimus. The altitude at this point was 8000 ft. At 7700 ft. we each took a Cooper hawk.

On the evening of the 30th, 29 house traps were set at the 8000 ft., level on a flat meadow in hopes of taking more of

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El Dorado Canyon, 6000 ft., Humboldt Range, Pershing Co., Nev.

Aug. (Cont) the M. mordax shot there in the morning.
17 P. maniculatus + 2 Perognathus parvus were taken. 26 of these traps were left out during the day + 1 M. mordax was taken.

~~Camp~~ We broke camp + left for the E. Humboldt Range or (East Range) on the afternoon of the 31.

Description of camp in El Dorado Canyon.

Camp was made in an old cabin beneath a number of large cottonwood trees. N of camp was a steep hill. The cabin was at the base of this hill. Artemisia + Juniperus dotted the hill which was about 1000 ft. high. S of camp, across a small stream rose a similar hill. The canyon cont. about a ~~mile~~ 1½ mi. E of camp where a mt. slope tended to box it in. Wild horses were seen on this slope. A line of cottonwoods aspen + underbrush bordered this stream up to a spring about ¼ mi. from the end of the canyon.

While quite a few different kinds of birds were seen they were comparatively few in numbers. ~~Both~~ Bats were seen in the evenings flying among the trees. Two were

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El Dorado Can, 6000 ft., Humboldt Range, Pershing Co., Nev.

Aug 1. taken.

List of birds seen ~~near~~ El Dorado Canyon.

1. Warbling Vireo 1 taken
2. Canyon Wren (10 + seen)
3. Cooper Hawk.
4. Valley Quail
5. Linnet
6. Jay sp?
7. Robin
8. Green-tailed towhee.
9. Nuthatch sp?
10. Vulture

Many Sceloporus were seen & quite a few were taken.

Two Stuped racers were collected. One, a small one, had halfway swallowed a Sceloporus & because it could not move fast was caught.

Two Yellow bellied racers were seen fighting over a P. maniculatus which one of them had partially swallowed. They were both taken.

The Cooper hawk that I took had the remains of some rodent, about the size of a Cotton in its stomach. One foot & some, some leg bones & fur were found.

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9 mi. E Fanning, 4100 ft., Buena Vista Val., Pershing Co., Nev.

Aug. 2 Leaving El Dorado canyon, we drove S to Oreano where we turned E over a mt. pass into Buena Vista Valley. The floor of this valley is quite flat & consists of hard cased alkali soil covered with Atriplex & Sarcobatus. There are a few farms that can be seen as you drive out of the pass. Alfalfa & Hay seem to be the reason for their existance.

We drove past (S) the nearest of these two farms & out across the valley until we reached a point 9 mi. E Fanning, 4100 ft., Buena Vista Val., Pershing Co., Nev. where we camped overnight beside the road. I set out 60 mouse traps as well as some crust caked sand dunes that were seen about ¼ mi S of the road. E. R. Hall & D. C. Smiley likewise set out 60 traps around these dunes.

From my sixty traps I took, 4 P. maniculatus, 2 P. longimembris, 1 D. microps & 1 R. megalotis.

Aug. 5 We left immediately after breakfast for the S base of Granite Mt. arriving there about 9:00 A.M. Aug. 2, 1936. The exact determined locality was. S base Granite Peak, E Range, Pershing Co., Nev.

Engler 1936 — S Base Granite Peak, E Range, Pershing Co. Nev.

(Cont'd)
Aug. 5: We made camp among some Buffalo Berry brush about 25 yds from a stream bed which held little water. Atriplex & Sarcobatus were the main bushes on the immediate surrounding slopes.

Two Golden Eagles circled low over the camp soon after we arrived, uttered a few sharp calls & soared out of sight. D. C. Smiley shot a cottontail & a sage sparrow early in the afternoon.

Towards evening E. R. Hall & I drove W to the edge of the alkali flat where we set out about 80 mouse traps on some sand dunes. ~~which were~~ The dunes were few in number & were not connected with each other. In fact across the width of Buena Vista Valley a continuous line of sand dunes was not found.

From these traps which were set about 40 ft. apart near Atriplex & Sarcobatus bushes was taken, 3 Dipodomys merriami, 8 D. microps levipes + 5 Perognathus longimembris many of which had whitish spots on them.

S Base Granite Peak, East Range, Pershing Co., Nev.

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(cont.)
Aug. 5 The morning of the Aug. 3 was spent in preparing these specimens at the completion of which camp was broken. We retraced our route of the previous day to the floor of the valley. E. R. Hall & D. C. Smiley cont. N up the valley after gophers. E. J. Hooper & I drove back up to Fanning where we made an overnight camp.

Mr O'Mara at Fanning reported that he had just finished poisoning the gophers in his vegetable garden. He also reported that rattlesnakes were quite thick. Blacktail Jackrabbits were also abundant, while quail could be seen on the hillsides. The whole valley (Spring Valley), in which Fanning is a part, is pitted with deep holes which were made by miners around 1850. Because of connecting tunnels between these holes the stream that flows down the valley has diminished.

We left Fanning Aug. 4, early & drove to 3 mi. S Mt. Rose, 8500 ft., Washoe Co., Nev. via Lovelock & Reno.

The camp was made in a Mt. meadow. About ½ mi. from the highway

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3 mi. S Mt. Rose, 8500 ft., Washoe Co., Nev.

Aug. 5. I mountain stream winds thru the meadow & sheep were seen grazing in the lower part.

Pinos monticola, Pinos Contorta, Aspen, Red Fir, White Fir, Spruce, Elderberry & Artemisia, & Manzanita are the main forms of plant life in the region

Just before dark it began to hail & the birds that were seen about the meadow took shelter in the trees & bushes.

25 mouse traps were set about the meadow near granite boulders only one P. maniculatus was taken the rest of the traps were sprung, most likely by hail stones. The mouse had been chewed up & could not be saved.

A wood chuck was seen on the evening of the Aug. 4, & one was taken by D. C. Smiley.

This morning was spent in hunting conies. Two were taken by other members of the party.

After breakfast I walked N along the stream & saw the following forms of bird life.

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3 mi. S Mt. Rose, 8500 ft, Washoe Co. Nev.

Aug. 5 am 1. Purple Finch
2. Junco
3. Mt. Bluebird
4. Red Shafted Flicker
5. Chipping Sparrow.
6. Sparrow hawk.
7. Hummingbird sp?
8. Robin
9. Stellar Jay.
10. Clarke Nutcracker (Heard)
11. Hairy Woodpecker

Belding Mantys ground squirrels, Callos, & chipmunks were seen.

Aug. 6, On the evening of Aug. 5 set out 20 mouse traps along the edge of the meadow where we were camped. Only one Microtus was definitely identified. A Bufo was taken at this time in the dense grass near the stream.

4 Peromyscus maniculatus & 1 Microtus montanus were taken.

We broke camp & left for Berkeley at 7:30 A.M. driving via Lake Tahoe, Auburn, Sacramento, & Davis.

Engler
1936

Callospermophilus

July 13 ½ mi. S Rock Cr., 6000 ft., Granite Mt., Washoe Co., Nev.
1 taken ~~at top~~ in gulley between two hills. It was shot as it was running into dense ~~brush~~. Others were seen at top of nearby hill on large granite boulders. (No. 79 ♂)

~~July~~ 18
July 18 1½ mi. Cr., ¾ mi. E Calif. Line 5300 ft., Washoe Co., Nev.
1 specimen shot as it was feeding on ripe currants. It was in the lower branches of the bush when shot. Others were seen running over the rock slide at same locality. (No. 98)

July 20 ½ mi. N Vya, 6200 ft., Washoe Co., Nev. 1 specimen taken in mouse trap near rock ledge. A number of holes were ~~seen~~ found ~~around~~ in ground around place where trap was set. It is thought that squirrel that they were burrows.

Aug. 5 3 mi. S Mt. Rose, 8500 ft., Washoe Co., Nev. Callos were watched while they were foraging among granite rocks beneath pines. It was noted that they continually followed the same forage beat + did not encroach on another's property. # ~~One~~ animal was seen to stretch + yawn much like a cat. This was done in a sunny spot on loose dirt,

Eptesicus fuscus

Engler
1936

July 1. W side Truckee R., 4900 ft., ½ mi. W Verdi, Washoe Co., Nev.

Two bats were shot a little after dusk along the W side of the Truckee R. They were flying in irregular flight along an open lane bordered on one side by aspens + on the other by a low hill with scattered pines. When shot they were flying about 50 ft above the ground.

Their flight did not seem as erratic as the smaller *Myotis* sp. which were seen.

July 2 One large bat, believed to be of the same species as above, was seen this evening. It was flying much lower ~~this evening~~ than on the previous evening. As a breeze was blowing from the south the insects apparently were not flying as high as previous night.

July 6 Smoke Cr., 3900 ft., 9 mi. E Calif. line, Washoe Co., Nev

Two specimens taken in open, Cottonwood lined lane. Fairly strong wind blowing. Flying from 4 to 25 feet above ground but stayed mostly near the ground

Engler

1936

July 2

Eutamias amoenus

W side Truckee R., 4900 ft., ½ mi. W Verdi, Washoe Co., Nev.

about 11:00 A.M. a chipmunk was heard chattering in the lower branches of a pine tree. It was taken & found to be an adult female. It was without embryo's but the mammae were quite large. Apparently it had young but had quit nursing. The cheek pouches contained the hulled seeds of a plant belonging to the rose family.

Dipodomys microps levipes

Engler
1936

July 4 — One individual, weighing 64.5 g. was taken 2½ mi. E Flanigan, 4200 ft., Washoe Co., Nev., among Sarcobatus + Artemesia that covered a low sandy hill. It was taken where the shrubbery was more dense. ($\frac{1}{30}$ 3.3% of total catch in this locality.)

July 15 — 1 specimen taken at Hausen, 4800 ft., Washoe Co., Nev. Taken among Artemesia + Sarcobatus on winddrift able sand. The cheek pouches were empty. The trail to the trap was very erratic. The tail makes a definite trail in the sand. D. ordii was taken in same locality.

July 24 — 2½ mi. SW Quinn R. Crossing, 4100 ft., Humboldt Co., Nev. 1 specimen taken on loose gravelly sand on which ~~Sarcobatus~~ was growing. Trail leading to trap was fairly straight.

July 25. — 1 mi. W Sulphur, 4040 ft., Humboldt Co., Nev. 1 specimen taken from sandy ground ~~which~~ had a thin hard crust covering. Atroplex was the ~~chief~~ main plant growing here ~~along~~ with a little Artemesia. These bushes were very scattered + low. Artemesia leaves filled the cheek pouches.

Engler — *Dispotomus micro-spermus Greenes* (cont.)

1936

July 28. 2½ mi. N Imlay, 4250 ft., Pershing Co., Nev. Taken on fairly loose sand on which Sarcobatus & some Atriplex was growing. Check pouches of one held leaves of Sarcobatus. When crushed the leaves were noticed to exude moisture, perhaps this is the way the animals obtain water. It was also noted that each check pouch held approximately the same weight of material.

July 29. 21 mi. W & 2 mi. N Lovelock 4000 ft., Pershing Co. Nev.

Aug. 3, 10 mi. E & 3 mi. S Fanning, 4000 ft., Buena Vista Val. Pershing Co., Nev.

Aug. 3, 9½ mi. E & 1 mi. S Fanning, 4000 ft., Buena Vista Val., Pershing Co., Nev. The above two localities were of poor sand, it had caked alkali was covered in spots by a thin layer of sand. Sarcobatus & Atriplex were the predominant plants.

Check pouches of one animal were filled with seed. One pouch held large seed while the other held a smaller seed in larger numbers, again the idea of balanced ration in the pouches was noted.

Engler
1936

Dipodomys merriami merriami

July 4. 2½ mi. E Flanigan, 4200 ft., Washoe Co., Nev.
Taken on a low sandy hill bordering the road, among Artemesia & Sarcobatus. It was taken in same locality as D. microps leviper & Onochomys Onochomys leucogaster. (16.5% of total catch in this locality.)

July 27. 10½ mi. W & 6 mi. N Sulphur, 4000 ft., Pershing Co., Nev. Taken on a crusty sandy soil in dry wash. Few Sarcobatus plants were growing here.

July 28 2½ mi. S Vernon, 4250 ft., Pershing Co., Nev. On sandy soil on which Sarcobatus & Atriplex were growing.

July 29. 30 mi. W & 4 mi. N Lovelock, 4300 ft. Pershing Co., Nev.
9½ mi. E & 1 mi. S Fanning, 4100 ft., Buena Vista Val.,
Aug. 3, Pershing Co., Nev. Taken on a thin sand cover over hard alkali. Atriplex & Sarcobatus.

Engler-
1936

Onochomys leucogaster

July 4. 2½ mi. E Flanigan, 4200 ft., Washoe Co., Nev.
Taken in association with sandy soil, Artemesia + Sarcobatus. Few in number compared to the Dipodomys sp. (10% of total catch in this locality.)

July 24 2½ mi. SW Quinn R. Crossing, 4100 ft., Humboldt Co., Nev. 1 specimen taken on loose sand. Artemesia, in small amts, + Sarcobatus was scattered over the ground. Stomach contents were almost completely insect remains.

Engler
1936

Dipodomys ordii columbianus

July 4 — 2½ mi. E Flanigan, 4200 ft., Washoe Co., Nev.

Taken on low sandy hill covered with Artemesia + sarcobatus. More of these taken than any other species in the same locality. (33⅓ + % of total catch.)

July 15. — Hausen, 4800 ft., Washoe Co., Nev.

3 specimens taken. Soil, wind drift-able with Artemesia + Sarcobatus growing in it. Many tracks were seen around the traps. Cheek pouches of the 3 individuals were empty.

Found in same habitat, at this place, as Peromyscus maniculatus, Dipodomys m. leviper + Microdipodops.

July 21 — 10½ mi. S Vya, 5800 ft., Washoe Co., Nev. 1 specimen taken. Cheek pouches empty.

Perognathus longimembris

Engler
1936

July 4. 2½ mi. E Flanigan, 4200 ft., Washoe Co., Nev.
Taken on sandy soil in association with Sarcobatus + Artemesia. 3 animals taken. 10% of total catch.

July ~~25~~ 24 4.3 mi. S Quinn R. Crossing, 4100 ft., Humboldt Co., Nev. 1 specimen (young) taken from among rocks on hill. Trap set under ~~adem~~ Sarcobatus bush.

July 25. 1 mi. W Sulphur, 4040 ft., Humboldt Co., Nev.
Taken on a sandy soil covered with a hard crust with many pebbles mixed in. Atriplex + Sarcobatus.

July 26 2 mi. E Antelope, 4400 ft., Humboldt Co., Nev. Taken on a rock shale slope.

" " 11 mi. E + 1 mi. N Jungo, 4200 ft., Humboldt Co., Nev. Taken on loose sand near Artemesia + Sarcobatus bushes

July 27. 10½ mi. W + ~~0~~ mi. N Sulphur, 4000 ft., Pershing Co., Nev. at base of rocky slope in dry wash.

July 28 2½ mi. S Vernon 4250 ft., Pershing Co., Nev.

Aug. 2, 9 mi. E Fanning 4100 ft., Buena Vista Val., Pershing Co., Nev.

Aug. 3, 9½ mi. E + 1 mi. S Fanning, 4100 ft., Buena Vista Val., Pershing Co., Nev.

Engler
1936

Microdipodops

July 4. 2½ mi. E Flanigan, 4200 ft., Washoe Co., Nev.
Five individuals were taken in association with Artemisia & Sarcobatus (which was growing on soft sand.
(16.5 % of total catch in this area)

July 15. Hausen, 4800 ft., Washoe Co., Nev. 7 individuals taken on wind drift table sand, in association ~~with~~ with Dipodomys ordii & D. m. levipes
One specimen had robbed oats in cheek pouch.
The rest (6 specimens) were empty.

July 21. 15 mi. S Vya, 5800 ft., Washoe Co., Nev. 1 specimen taken (♀ 114) among Artemisia bushes on gravelly soil.
12 mi. S Vya, 5800 ft., Washoe Co., Nev.
2 taken from sandy soil beside road (1 young). Trap was set beside open hole in sand. Tracks from soil to trap were in a direct line.

July 24. 2½ mi. S Quinn R. Crossing, 4100 ft., Humboldt Co., Nev.

July 25 1 mi. W Sulphur, 4040 ft., Humboldt Co., Nev.

July 26 11 mi. E & 1 mi. N Jungo, 4200 ft., Humboldt Co., Nev.

" " 8 mi. E & 1 mi. N Jungo, 4200 ft., Humboldt Co., Nev.

Peromyscus m. sonoriensis

Engler
1936

July 4. 2½ mi. E Flanigan, 4200 ft., Washoe Co., Nev.

Taken in the sandy areas of this locality where the bushes are more widely scattered. 6 specimens were taken representing 6.6% of the total catch.

July 7 Smoke Cr., 3900 ft., 9 mi. E Calif. line Washoe Co., Nev.

3 taken on sandy, Artemesia covered bank bordering stream. Perognathus parvus taken here also.

July 10 17 mi. W Deephole, 4800 ft., Washoe Co., Nev. 3 individuals taken from a trap line of 41 traps. The ground was very rocky with scattered, low, Artemesia bushes which were on a hill ~~which~~ dotted with juniper trees. Taken in association with P. crinitus & P. luteri, Perognathus parvus & Leithrodontomys megalotis.

July 12. Rock Cr., 6000 ft., Granite Mt., Washoe Co., Nev.

1 specimen taken on top of steep hill near a pile of granite boulders. The ground around the rocks was coarse ~~gravelly~~ from the decomposing granite.

Along the Cr. at an altitude of 5200 ft, 5 specimens were taken from the rocky hill bordering the stream. Found in association here with Perognathus parvus. The soil was dry & dusty.

Engler
1936

P. maniculatus (cont.)

July 14 — 15 mi NNW Deephole, 5500 ft., Washoe Co., Nev.
11 specimens taken from 20 mouse traps set on rather loose loamy soil on which artemesia was growing in abundance.

July 15 — Hausen, 4800 ft., Washoe Co., Nev. 6 taken from winddrifted sandy soil ~~and~~ close to artemesia bushes.

July 17 — 12 Mi. Cr., ½ mi. E Calif. Line, Washoe Co., Nev. 11 specimens taken on rocky slope. Artemesia + some currant bushes present.

July 20 — Same locality. 1 specimen ~~taken~~ caught in rat trap at base of rock ledge ~~among~~ in Aspen grove. It had been entirely swallowed, probably by snake, + then regurgitated.

July 20. — ½ mi. N Vya, 6000 ft., Washoe Co., Nev. 27 taken on steep slope covered with Artemesia tridentata + Balsamhoriza.

July 21 — 15 mi. S Vya, 5800 ft., Washoe Co., Nev. 6 taken on gravelly, artemesia dotted ground.

July 22 — 4 mi. S Diessner, 5800 ft., Washoe Co., Nev. 10 taken
" " — " " SW " , 3 " " " " " 14 " .

" 23 — 5 mi. N Summit L., 5900 ft, Humboldt Co., Nev.
5 taken on sand + gravel beside road. Both Artemesia + tridentata were present.

" 24 — 1 mi. W Sulphur, 4040 ft., Humboldt Co., Nev. 1 taken on sandy soil covered with hard crush. Scattered Atriplex + Artemesia dotted the ground.

Perognathus parvus

Engler
1936

July 7. Smoke Cr., 3900 ft., 9 mi. E of Calif. line, Washoe Co., Nev.

1 specimen was taken on a sage bush covered bank alongside an alfalfa field. The ground was somewhat sandy but hard packed. It was caught in association with Peromyscus maniculatus

July 12. Rock Cr., 5000 ft., Granite Mt., Washoe Co., Nev.

6 specimens were taken on the rocky slope north of the stream. One was taken within 6 inches of the water. A ♀ had 6 embryos x 15 cm. Her cheek pouches were filled with the seeds of a grass that was quite plentiful on the lower slopes

July 20 ½ mi. N Vya, (6200 + 6000) ft., Washoe Co., Nev.

2 taken from rocky hill W of camp. Artemesia & Balsamhoriza were in abundance.

July 21 15 mi. S Vya, 5800 ft., Washoe Co., Nev. 1 taken on gravelly soil.

July 21 12 mi. S Vya, 5800 ft., Washoe Co., Nev.

July 22 4½ mi. S Diessner, 5800 ft., Washoe Co., Nev.

taken on loose gravelly soil among artemesia bushes.

July 26 11 mi. E & 1 mi. N Jungo, 4200 ft., Humboldt Co., Nev.

" 28 2½ mi. S Vernon, 4250 ft., Humboldt Co., Nev.

" 30 El Dorado Can., 6100 ft., Humboldt Range, Pershing Co., Nev.

Sylvilagus audubonii

Engler
1936

July 7. Smoke Cr., 4000 ft., 3¼ mi. E Calif. line Washoe Co., Nev.

1 ♀ (No 58) taken from brushy land along Cr. under bush. Mammary glands were large, evidently had young.

July 13 ½ mi. S Rock Cr., 6000 ft., Granite Mt., Washoe Co., Nev.

One taken near dry stream bed in heavy brush covered slope South of Rock Cr. It was a ♀ & contained 5 embryos x 90 mm. (Cat. No. 80)

Engler
1936

Lagurus cuntatus

July 21. 15 mi. S Vya, 5800 ft., Washoe Co., Nev. 1 young dead specimen No. 128 found on gravelly soil under artemesia bush.

July 23 5 mi. N Summit L., 5900 ft., Humboldt Co., Nev. 1 adult ♀, No. 129, taken on hill covered with Artemesia tarcobatus. This specimen taken in rock pile beside road.

Eutamias minimus

Engler
1936

July 20. ½ mi. N Vya, 6000 ft., Washoe Co., Nev. One taken near top of steep rocky hill, near pile of lava rocks.

July 22 4 mi. S Diessner, 5800 ft., Washoe Co., Nev. One taken in mouse trap on flat, open land The soil was rather coarse. Sarcobatus + artemesia bushes were found in abounda. Taken in assoc. with P. maniculatus + P. pawnus.

July 23. 5 mi. N Summit L. 5900 ft., Humboldt Co., Washoe Nev.
1 specimen taken in mouse trap near ~~edge~~ road on rocky ground + beneath Sarcobatus bush. Another specimen was shot at same locality, a number of others were observed feeding on the heads of some tall grass like plant. The animals would jump on the stiff stems + climb them until they would bend to the ground. The heads of the grass were then cut off + left on the ground as another blade was ~~caught~~ climbed.

July 31 El Dorado Can., 8000 ft. Humboldt Range, Pershing Co., Nev.

Engler
1936

Neotoma lepida

July 6 — ½ mi. NW Flanigan, 4200 ft., Washoe Co., Nev.
1 specimen taken near rock ledge in rat trap. Caught across the neck. yet dragged trap 30 feet from where it was set. Fecal material abounded around base of rock ledge & also in pockets in the rock. Stomach contents of plant material.

July 17 — Rock Cr., 6000 ft., Granite Mt., Washoe Co Nev. 1 specimen taken from rock pile at top of steep hill S of Camp. "Callo" also seen on this pile & Porcupine feces were found among these rocks which varied from 1 foot to 10 feet in diameter.

July 20 — ½ mi. N Vya, 6000 ft., Washoe Co., Nev.
1 specimen taken at base of rock rim atop steep hill W of camp. Sarcobatus & Balsamhoriza were in abundance. Trail of fecal material found at base of rock ledge.

July 24 — 5 mi. S Quinn R. Crossing, 4100 ft., Humboldt Co., Nev. 1 taken from rock pile on hill E of road. Caught in mouse trap. It dragged the trap over 40 ft. from where it was set.

Engler-
1936

Neotoma cinerea

July 9 — Smoke Cr., 3900 ft., 9 mi. E Calif. line, Washoe Co., Nev. Many found at this locality along stream, & in cabin.

July 20. — ½ mi. N Viya, 6200 ft., Washoe Co., Nev. 1 taken at base of rock ledge near top of steep hill.

Engler
1936

Reithrodontomys megalotis

July 7 Summit Co., 3800 ft., 9 mi. E Calif. line, Washoe Co., Nev. Taken on dry sandy bank in association with P. parvus & P. maniculatus.

July 10 17 mi. W Deephole, 4600 ft., Washoe Co., Nev.

2½ mi. SW Quinn R. Crossing, 4100 ft.,

July 24 Humboldt Co., Nev.

" 25 1 mi. W Sulphur 4040 ft., Humboldt Co., Nev.

9 mi. E Fanning, 4100 ft., Buena Vista Val.,

Aug. 7 Pershing Co., Nev.

Engler 1936

Plecognathus formosus

July 27 10½ mi. W & 6 mi. N Sulphur, 4000 ft., Humboldt Co., Nev. One taken on rocky slope covered with large lava slabs, only a few Sarcobatus bushes were present.

July 29 30 mi. W & 4 mi. N Lovelock, 4300 ft., Pershing Co., Nev. Taken on gravel slope of decomposed granite. No rocks could be seen in immediate vicinity. This hill had been much trampled by sheep & only a few large Sarcobatus plants were present.

July 29 30 mi. W & 3 mi. N Lovelock, 4100 ft., Pershing Co., Nev. Taken on sandy soil mixed with a few large pebbles, about 50 ft from dry stream bed. Many Sarcobatus bushes present.

Myotis californicus

Engler
1936

July 7 — Smoke Cr., 3950 ft., 4½ mi. E Calif. line, Washoe Co., Nev. Shot while flying up road at bottom of deep ravine. Flight more irregular than Evotis

July 17 — 12 mi. Cr., ½ mi. E Calif. line, 5300 ft., Washoe Co., Nev. Bats would appear at 8:30 P.M. every night. When shot stomachs would already be filled, therefore probably left dens before this time.

No. 192 ♂ El Dorado Can., 6000 ft., Humboldt Range, Pershing Co., Nev.

July 30

Engler
1936

Microtus mordax

July 22 4 mi. SW Diessner, 5800 ft., Humboldt Co., Nev. Taken on edge of hay field that had just been cut.

July 20 3 mi. N Vya, 6000 ft., Washoe Co., Nev. Taken in thick grass near spring. Runways not very definite.

Engler
1936

Thomomys quadratus

July 20. ½ mi. N Nya. 6200 ft. Washoe Co. Nev. One young taken on rocky slope in mousetrap. A few ~~burrows~~ mounds were seen but no other specimens were taken.

~~July 22 4 mi. SW Dixonn, 5800 ft. Washoe Co. Nev. Taken on edge of hay field that had just been cut -~~

Engler
1936

W side of Truckee R., 4900 ft., ½ mi. W Verdi, Washoe Co., Nev.

July 1, 1936

14	♀	Eptesicus	fuscus	116, 43, 12, 19, 9
15	♀	"	"	124, 48, 12, 16, 8.5
16		Rana		

July 2, 1936

17	♀	Eutamius	amoenus	[121], [90] 27, 17

2½ mi E Flanigan, 4200 ft., Washoe Co., Nev.

July 4, 1936

18	♀	Dipodomys	merriami merriami	242, 146, 37, 13
19	♀	Onochomys	leucogaster	145, 42, 19, 19.5
20	♀	"	"	142, 41, 20, 21
21	♀	"	"	137, 38, 19, 19
22	♂	Microdipodops		164, 89, 24, 10
23	♀	"		163, 82, 25, 11
24	♀	Dipodomys	microps levipes	273, 157, 47, 15

4½ mi. S Flanigan, 4100 ft., Washoe Co., Nev.

25		Hyla		
26		"		
27		"		
28		"		
29		"		
30		"		
31		"		
32		"		
33		"		

Engler
1936

4½ mi. S Flanigan, 4100 ft., Washoe Co., Nev.
July 4, 1936

34 Hyla
35 "
36 "
37 Bufo
38 "
39 "

July 5, 1936

40 Crotaphytus wislizenii
41 Agelaius tricolor ♂
42 " " ♀
43 " "
44 "

July 6, 1936

½ mi. NW Flanigan, 4200 ft., Washoe Co., Nev.

44 ♀ Perognathus longimembris 136, 75, 20, 6
45 ♂ " " 138, 75, 20.5, 6
46 ♀ Microdipodops 166, 95, 26, 6
47 ♀ " 157, 80, 25, 10
48 ♀ Dipodomys merriami 227, 134, 37, 14
49 ♂ Neotoma lepida 282, 121, 33, ?

4½ mi. S Flanigan, 4100 ft., Washoe Co., Nev.
July 5, 1936

50 Agelaius tricolor ♂

Smoke Cr., 3900 ft., 9 mi. E Calif. line, Washoe Co., Nev.

Engler 1936

July 7, 1936

51	♀	Peromyscus maniculatus		154-61-20-18
52	♀	"	"	153-59-20-18
53	♀	"	"	155-62-20-18
54	♂	Perognathus parvus		179-91-24-6.5
55	♂	Reithrodontomys megalotis		144-68-18-19
56	♂	Eptesicus fuscus		119-45-11-18-7
57	♂	"	"	114-44-6-14.5-5

Smoke Cr., 4000 ft., 3¼ mi. E Calif. line, Washoe Co., Nev.

July 7, 1936

58	♀	Sylvilagus auduboni		362-41-77-65

Smoke Cr., 3950 ft., 4½ mi. E Calif. line, Washoe Co., Nev.

July 7, 1936

59	♀	Myotis californicus		81-42-6-19-7 Wt. 4.9g
60	♀	"	"	85-46-6-18-8 " 4.g
61	♂	"	"	91-46-7-19-7 " 4.4g.

Smoke Cr., 3900 ft., 9 mi. E Calif. line, Washoe Co., Nev.

July 8, 1936

62		Thamnophis sp.		
63	♂	Arkansas Kingbird		
64	♂	"	"	

July 9, 1936

65	♀	Neotoma cinerea	403 - ~~346~~	171-45-35
66	♂	"	"	346-151-47-35

17 mi. W Deethole, 4800 ft., Washoe Co., Nev.

July 10, 1936

67	♂	Perognathus parvus		191-90-26-19
68	♂	Peromyscus crinitus		176-88-20-20

Engler 17 mi W Deephole, 4800 ft. Washoe Co., Nev.
1936 July 10, 1936

69 ♂ Peromyscus maniculatus 152-64-21-18
70 ♂ Reithrodontomys megalotis 151-71-18-15

Smoke Cr., 3900 ft., 9 mi. E Calif. line, Washoe Co., Nev.

July 8, 1936

71 A ♂
~~71~~ Eptesicus fuscus 112-44-10-28-11

Rock Cr., 6000 ft., Granite Mt., Washoe Co., Nev.

July 11, 1936

71 Hyla
72 "

July 12, 1936

73 ♂ Peromyscus maniculatus 155-69-21-18 Wt. 16.8g.
74 ♂ Neotoma lepida 245-88-29-25 " 90.8g
75 Rattlesnake.

Rock Cr., 5200 ft., Granite Mt., Washoe Co., Nev.

July 12, 1936

76 ♂ Perognathus parvus 189-96-24-8
77 ♀ " " 184-82-24-9
78 ♂ " " 193-103-24-9

½ mi. S Rock Cr., 6000 ft., Granite Mt., Washoe Co., Nev.

July 13, 1936

79 ♂ Callospermophilus 275-96-42-18 Wt. 234.3
80 ♀ Sylvilagus audubonii 374-55-82-64 Wt. 1127g em. 5 90

July 13, 1936 1 mi. S Rock Cr., 7000 ft., Granite Mt., Washoe Co., Nev.

81 Antler of White Tailed deer.
82 ♀ Red shafted Flicker
83 ♀ Hairy Woodpecker.

Engler
1936

Hausen, 4800 ft., Washoe Co., Nev.
July 15, 1936

84	♀	Dipodomys m. levipes	276-162-40-14	Wt. 58.4 g
85	♀	Microdipodops	165-86-27-10	" 13.g
86	♀	"	156-86-26-10	" 10.6 g
87	♀	"	156-86-25-10	" 13 g
88	♂	Peromyscus maniculatus skull only	150-63-20-18	" 16.5g
89	♂	" "	157-70-21-19	" 18.3 g
90	♀	" "	154-68-19-18	" 17.4 g
91	♂	Dipodomys ordii	253-143-41-13	" 56.4 g
92	♀	" "	249-142-40-12	" 50.1 g
93	♀	" "	254-142-42-12	" 50.6 g

12 mi. Cr., 3/4 mi. E Calif. line, 5300 ft, Washoe Co., Nev.

July 17, 1936

94.	♂	Peromyscus maniculatus	161-65-21-17	Wt. 20.1 g.
95	♀	" "	151-60-20-18	" 18.4 g
96	♂	" crinitus	174-91-21-19	" 15.7 g
97	♀	" "	174-91-21-19	" 17.3 g
July 18. 98	♀	Callospermophilus	261-101-40-17	" 140.9 g.

12 Mi. Cr., 1/2 mi. E Calif. line, 5300 ft, Washoe Co., Nev.

July 17, 1936

99	♀	Myotis	89-37-9-14-6	Wt. 6.9 g
100	♀	"	91-39-9-15-7	" 7.5 g.
101	♀	California Blue Jay	Wt. 87.1 g	
102		" " "	" 96.4 g.	

1/2 mi. N Vya, 6000 ft., Washoe Co., Nev.

July 20, 1936

103	♂	Microtus mordax	176-61-23-12	Wt. 35.8 g
104	♂	Eutamias minimus	[89]-[?]-32-14	" 36.2 g

Engler
1936

½ mi. N Vya; 6200 ft., Washoe Co, Nev.
July 20, 1936

(A)	104	♂	Peromyscus maniculatus	148-61-22-17	Wt. 17.1 g.
	105	♂	" "	153-66-20-17	" 18.7 g
	106	♂	" "	145-59-21-19	" 19. g
	107	♂	" "	166-71-22-18	" 21. g.
	108	♀	Perognathus parvus	174-87-24-8	" 20.2 g
	109	♀	Thomomys quadratus	137-31-23-4	" 33.5 g
	110	♂	Callospermophilus	238-84-41-19	" 117.7 g
	111	♂	Neotoma cinerea	378-171-45-33	" 320.7 g

½ mi. N Vya, 6000 ft., Washoe Co., Nev.
July 20, 1936

	112	♂	Neotoma lepida	[?]-[?]-32-29	Wt. 114.4

1½ mi. S Vya, 5800 ft., Washoe Co., Nev.
July 21, 1936

	113	♂	Perognathus parvus	177-96-25-8	Wt. 18.1 g.
	114	♀	Microdipodops sp	154-89-26-9	" 10.9 g

10½ mi. S Vya, 5800 ft., Washoe Co., Nev.
July 21, 1936

	115	♂	Dipodomys ordii	236-136-41-12	Wt. 40. g

12 mi. S Vya, 5800 ft., Washoe Co., Nev.
July 21, 1936

	116	♂	Eutamias minimus	179-87-30-14	Wt. 30.8 g
	117	♂	Microdipodops	155-85-15-10	" 13.8 g
	118	♀	Perognathus parvus	158-81-23-8	" 13.8 g

15 mi. S Vya, 5800 ft., Washoe Co., Nev.
July 21, 1936

	119	♂	Eutamias minimus	198-95-31-14	Wt. 34.6 g

Engler
1936

10½ mi. S Vya, 5800 ft., Washoe Co., Nev.
July 20

120 ♂ Callospermophilus 269-102-41-19 wt. 165

4 mi. S Diessner, 5800 ft., Washoe Co., Nev.
July 22, 1936

121 ♀ Peromyscus maniculatus 179-78-23-18 Wt. 31.4 g. Em. 4x22
122 ♂ Perognathus parvus 183-101-25-9 " 22.9 g
123 ♂ Eutamias minimus 194-91-32-8 " 35 g

4 mi. SW Diessner, 5800 ft., Washoe Co., Nev.
July 22, 1936

124 ♀ Peromyscus maniculatus 154-64-19-16 Wt. 17.6 g
Coll. by E.R. Hall
125 ♂ Microtus mordax 175-61-23-13 " 31.7 g
Coll. by E.R. Hall
126 ♂ " " 148-49-21-12 " 22. g
Coll. by E.R. Hall
127 ♀ " " 179-58-23-13 " 37.8 g
~~Pick up~~
128 ~~Young Lag~~

15 mi. S Vya, 5800 ft., Washoe Co., Nev.
July 21, 1936

Pick-up
128 Young Lagurus

5 mi. N Summit L., 5900 ft., Humboldt Co., Nev.
July 23, 1936

129 ♀ Lagurus curtatus 135-28-19-12
130 ♂ Eutamias minimus 185-86 31-14

5 mi. S Quinn R. Crossing, 4100 ft., , Humboldt Co., Nev.
July 24, 1936

131 ♂ Neotoma lepida 265-114-33-28 Wt. 121.7 g.

2½ mi. SW Quinn R. Crossing, 4100 ft., Humboldt Co., Nev.
July 24, 1936

132 ♂ Dipodomys microps 276-158-45-14 Wt. 70.1 g.
133 ♂ Onochomys 136-36-20-18 " 30.8 g

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1

2½ mi. SW Quinn R. Crossing, 4100 ft., Humboldt Co., Nev.
July 24, 1936

Skull only
134 ♂ Reithrodontomys megalotis 142-62-17-15 Wt. 9.9 g
135 ♀ Microdipodops 162-89-25-9 " 13.1 g

4½ mi. S Quinn R. Crossing, ~~4100~~ 4100 ft., Humboldt Co., Nev.
July 24, 1936

136 ♀ Microdipodops 162-89-25-10 wt. ~~10.9~~ 12.4 g
137 ♀ " [?]-[?]-25-9 " ~~12.4 g~~ 10. g
138 ♀ " 159-86-28-10 " 12.5 g

1 mi. W Sulphur, 4040 ft., Humboldt Co., Nev.
July 25, 1936

139 ♀ Perognathus longimembris 131-~~86~~ 76-19-7 Wt. 7.1 g
140 ♀ " " 124-65-19-7 " 7.1 g
141 ♀ Peromyscus maniculatus 145-63-20-17 " 12.1 g
142 ♂ Microdipodops 144-81-26-9 " 10.1 g
143 ♂ ei Reithrodontomys megalotis 125-63-18-15 " 8.5 g.
144 ♀ Dipodomys microps 262-148-41-15 " 59.2 g

9½ mi. N Sulphur, 4050 ft., Humboldt Co., Nev.
July ~~25~~ 26, 1936

145 ♂ Perognathus longimembris 140-73-20-9 Wt. 8. g.
146 ♂ Microdipodops 169-101-25-11 " 12.4 g.
147 ♂ " 167-94-25-11 " 11.9 g.

2 mi. E Antelope, 4400 ft., Humboldt Co., Nev.
July ~~26~~ 26, 1936

148 ♂ Perognathus longimembris 129-68-18-7 Wt. 6 g.

11 mi.
8 mi. E & 1 mi. N Jungo, 4200 ft., Humboldt Co., Nev.
July ~~25~~ 26, 1936

149 ♀ Perognathus longimembris 130-69-18-7 Wt. 7.5 g.
150 ♂ " parvus 187-103-26-9 " 21.2 g

11 mi. E + 1 mi. N Jungo, 4200 ft, Humboldt Co., Nev.
July 26, 1936

151 ♀ Microdipodops 160-92-26-10 Wt. 13.1 g

8 mi. E + 1 mi. N Jungo, 4200 ft, Humboldt Co., Nev.
July 25, 1936

152 ♀ Microdipodops 163-~~87~~ 91-26-10 Wt. 13.5 g.
153 ♀ " 162-91-26-10 " 13.5 g.
154 ♀ " 160-88-25-10 " 13.5 g.
155 ♀ " [1]50-[8]2-26-10 " 13.2 g.

~~10 mi. W + 6 mi. N Sulphur, 4 mi. N~~

10½ mi. W + 6 mi. N Sulphur, 4000 ft., Humboldt Co, Nev.
July 27, 1936

156 ♂ Perognathus formosus 185-103-25-11 Wt. 16.5 g
157 ♀ Peromyscus crinitus 162-85-20-20 " 13.8 g
~~158~~

10½ mi. W + 6 mi. N Sulphur, 4000 ft., Pershing Co., Nev.
July 27, 1936

158 ~~159~~ ♂ Dipodomys merriami 233-134-36-13 Wt. 40.5 g
159 ~~160~~ ♂ Peromyscus maniculatus 170-77-22-19 " 22.1 g
160 ~~161~~ ♂ " " 173-73-22-18 " 21.7 g
161 ♀ " " 169-81-22-18 " 14. g
162 ♀ Perognathus longimembris 142-74-20-7 " 7.7 g

2½ mi. S Vernon, 4250 ft, Pershing Co., Nev.
July 28, 1936

163 ♀ Perognathus longimembris 142-74-19-6
164 ♂ " " 137-75-19-6
165 ♀ 132-71-19-6
166 ♂ Perognathus parvus 179-91-25-9
167 ♂ Dipodomys merriami 245-143-39-14

2½ mi. S Vernon, 4250 ft., Pershing Co., Nev.
July 28, 1936

(A.)167 ~~168~~	♀	Dipodomys microps	268-156-43-14	

3 mi. S Vernon, 4250 ft., Pershing Co., Nev.
July 28, 1936

168	♂	Dipodomys microps	262-145-41-14	
169	♀	" merriami	235-131-37-13	
170	♀	" "	239-144-39-13	

30 mi. W & 4 mi. N Lovelock, 4300 ft., Pershing Co., Nev.
July 28, 1936

171	♂	Perognathus formosus	218-111-26-11	Wt. 17.7g
172	♀	Peromyscus maniculatus	154-60-22-15	" 17.7g
173	♂	" "	139-57-21-17	" 13.3g
174	♀	Dipodomys merriami	234-132-38-13	" 42.9g
175	♂	" "	234-134-39-13	" 27.8g
176		" "	215-130-38-12	" 15.6g

30 mi. W & 3 mi. N Lovelock, 4300 ft., Pershing Co., Nev.
July 29, 1936

177	♀	Perognathus formosus	[?]-[?]-26-11	Wt. 19.2g
178	♂	Peromyscus maniculatus	161-68-21-17	" 16.2g
179	♂	Dipodomys merriami	225-131-37-12	" 30.9g.

21 mi. W & 2 mi. N Lovelock, 4000 ft., Pershing Co., Nev.
July 29, 1936

180	♀	Dipodomys microps	280-164-43-13	Wt. 59.g
181	♀	" "	272-160-42-13	" 56.7g
182	♂	" "	[212]-[108]-43-13	" 62.3g

Engler
1936

El Dorado Can., 6000 ft, Humboldt Range, Pershing Co. Nev.
July ~~29~~ 30 1936

183 Striped Racer
~~Yellow bellied~~ Racer

184 Sceloporus

July 30, 1936

185 ♂ Onochomys 118-35-19-17 wt. 17.3g.

186 ♂ Peromyscus maniculatus 159-73-21-17

187 ♀ " " 170-75-21-20 " 32.7g

188 ♂ " " 152-64-21-18 " 17.8g

189 ♀ " " 164-73-21-20 " 21.1g

190 ♂ Canyon Wren " 10.2g

191 ♂ Warbling Vireo " 12.g.

192 ♂ Myotis californicus 79-41-6-19-7

El Dorado Can., 6500 ft., Humboldt Range, Pershing Co., Nev. July 30, 1936

193 Robin

El Dorado Can., 6100 ft., Humboldt Range, Pershing Co., Nev.

July 30, 1936

194 ♂ Perognathus parvus 185-94-25-9 wt. 19.1g

195 ♂ " " 199-103-25-9 " 20.5g

El Dorado Can., 7200 ft., Humboldt Range, Pershing Co., Nev.

July 31, 1936

196 ♀ Cooper Hawk wt. 419 g.

197 El Dorado Can., 8000 ft., Humboldt Range, Pershing Co., Nev.

July 31, 1936

197 ♂ Eutamias minimus 193-86-29-~~23~~ 13 wt. 33.2g

198 Striped Racer

El Dorado Can., 7700 ft., Humboldt Range, Pershing Co., Nev.

July 31, 1936

199 Sceloporus

El Dorado Can., 6000 ft., Humboldt Range, Pershing Co., Nev.

July 31, 1936

200 Yellow Bellied ~~Racers~~ Racer.

El Dorado Can., 7800 ft., Humboldt Range, Pershing Co., Nev.

Aug. 1, 1936

201	♀	Perognathus parvus	186-97-25-9	Wt. 20.4g
202	♀	Peromyscus maniculatus	176-88-21-17	" 20.3g
203	♀	Skull only Microtus mordax	157-52-20-13	" 26.2g

9 mi. E Fanning, 4100 ft., Buena Vista Val., Pershing Co., Nev.

Aug. 2, 1936

204	♀	Perognathus longimembris	129-72-20-6	
205	♂	" "	136-74-20-6	
206	♂	Peromyscus maniculatus	146-59-21-16	
207	♂	" "	169-71-21-18	
208		Reithrodontomys megalotis	142-65-18-13	

10 mi. E + 3 mi. S Fanning, 4100 ft., Buena Vista Val., Pershing Co., Nev. ~~July~~ Aug. 2, 1936

209 Horned Toad

Aug. 3, 1936

210	♀	Dipodomys microps	274-167-43-14	Wt. 64.7g
211	♂	" "	291-171-43-13	" 68.1g

9½ mi. E + 1 mi. S Fanning, 4100 ft., Buena Vista Val., Pershing Co., Nev. Aug. 3, 1936

212	♂	Dipodomys microps	275-165-40-13	Wt. 61.3g
213	♀	" "	275-160-43-15	" 51.1g
214	♀	" "	273-158-41-13	" 53.[illegible]

Engler 1936

9½ mi. E + 1 mi. S Fanning, 4100 ft., Buena Vista Val., Pershing Co., Nev. Aug. 3, 1936

215	♂	Dipodomys	microps	283-167-42-13	Wt. 60.8 g
216	♂	"	merriami	227-131-36-13	" 43.8 g
217	♂	"	"	240-132-36-13	" 41.5 g
218	♀	"	"	226-125-36-13	" 38.7 g
219	♀	Perognathus	longimembris	142-81-18-6	" 7. g
220	♀	"	"	136-68-18-6	" 8.5 g
221	♀	"	"	141-75-18-6	" 7.7 g

3 mi. S Mt. Rose 8500 ft., Washoe Co., Nev. Aug. 5, 1936

222	♂	Skeleton only Cassin Purple Finch	Wt. 27.1 g.
223		Bufo	
224		Nighthawk	Wt. 56. g.